

DIVISION 16 - ELECTRICAL

Section 16320 - Transformers (Medium Voltage)

Introduction

Transformers should be mounted on a raised concrete pad a minimum of 4" above the finished floor.

At each transformer a ground ring should be supplied with a 3/4" x 10' copper weld or copper clad ground rod at each corner tied together with a 3/0 copper ground conductor. This shall supply a grounding electrode for the transformer. Exothermic weld grounding electrode conductor to transformer ground pad.

Part 1 - General

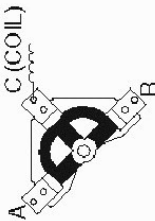
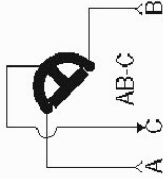
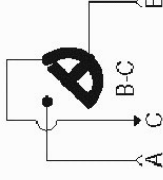
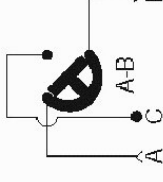
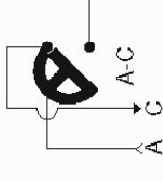
- Refer to Appendix Section 16320 and incorporate into project.
- Coordinate new building design to allow for easy removal of distribution transformers from building interiors.
- Transformers shall first be considered for outdoor placement. When indoor placement is approved, provide permanent hoisting and dolly apparatus with egress pathway for easy replacement. Utilize station transformers with a primary knife switch.
- Transformers shall not be loop feed with 4-way load break switch. Mount arrestors on the spare bushings. Refer to detail 16320-D1
- Aluminum wound transformers are acceptable up to 2500 KVA. Transformer shall be installed with load break primary terminations, surge arrestors and fee through load break adaptors.

Part 2 - Products

- Refer to Appendix Section 16320 and incorporate into project.

Part 3 - Execution

- Refer to Appendix Section 16320 and incorporate into project.
- All 13.8 KV equipment not utilized or in use inside or outside a building and its associated wiring shall be removed all the way back to where it originates.
- All installations shall be inspected by UFS Engineer, UFS Inspectors, and FM Medium Voltage shop prior to energization.

SWITCH TYPE	TYPICAL DECAL STENCIL LAYOUT	VIEW OF CONTACTS FROM FRONT (HANDLE) END OF SWITCH	POSITION 1 SCHEMATIC FRONT SCHEMATIC AS SHIPPED AND AS SHOWN AT LEFT	POSITION 2 SCHEMATIC SWITCH HANDLE ROTATED 90° CLOCKWISE FROM POSITION 1	POSITION 3 SCHEMATIC SWITCH HANDLE ROTATED 90° CLOCKWISE FROM POSITION 2	POSITION 4 SCHEMATIC SWITCH HANDLE ROTATED 90° CLOCKWISE FROM POSITION 3																				
T-BLADE MAKE BEFORE BREAK	<div>LINE A & B TO C</div> <div>LINE A ONLY LINE B ONLY TO C</div> <div>LINE A TO B C OPEN</div>																									
<div>FOUR-POSITION SECTIONALIZING LOADBREAK SWITCH PUB 03047 FOR INCLUSION IN PAD MOUNTED TRANSFORMERS</div>																										
<div>UNIVERSITY OF ARIZONA MANUAL OF DESIGN SPECIFICATION STANDARDS</div> <div>STANDARD DETAIL: 4-WAY LOOP FEED SWITCH</div> <div>DRAWN BY: C.P.S.</div> <div>APPROVED BY: B.COUSHY</div> <div>ACAD: 16320-D1.DWG</div> <div>DETAIL NO. 16320-D1</div> <div>REVISIONS</div> <table><tr><td>1</td><td></td></tr><tr><td>2</td><td></td></tr><tr><td>3</td><td></td></tr><tr><td>4</td><td></td></tr><tr><td>5</td><td></td></tr><tr><td>6</td><td></td></tr><tr><td>7</td><td></td></tr><tr><td>8</td><td></td></tr><tr><td>9</td><td></td></tr><tr><td>10</td><td></td></tr></table>							1		2		3		4		5		6		7		8		9		10	
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End of Section 16320